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METHODS AND APPARATUS FOR HELICAL RECONSTRUCTION FOR MULTISLICE CT SCAN

ABSTRACT OF THE DISCLOSURE

One embodiment of the present invention is a method for imaging an object with a computed tomographic (CT) imaging system that includes steps of helically scanning the object with a multi-slice CT imaging system to acquire attenuation measurements of the object, the measurements including more than two conjugate samples for estimation of a projection at a plane of reconstruction of the object; and filtering and backprojecting the attenuation measurements of the object, including the more than two conjugate samples, to reconstruct at least one image slice of the object. An improved sampling pattern and better use of the attenuation samples obtained during a scan is thus provided.